





FIG. 2

SERVICES
CONTROL
PLATFORM

SERVICES APPLICATION
HTTP
TCP/UDP
IP
MPC
ETHERNET

260

IP ROUTER

IP	
MPC	MPC
ETHERNET	ETHERNET

13

ATM TERMINATOR

RFG1483	
IP	AAL5
MPC	ATM
ETHERNET	PHYSICAL

250

ATM NETWORK

ATMSW & DSLAM

ATM	
PHYSICAL	DSL

10, 9

DSL MODEM

RFG1483	
AAL5	IP
ATM	MPC
DSL	ETHERNET

2

COMPUTER

SERVICES APPLICATION
HTTP
TCP/UDP
IP
MPC
ETHERNET

7

FIG. 3

4/4

START

405

PROVIDE IP ADDRESS OF HTTP WEB SERVER TO COMPUTER (e.g., USING BROADCAST MESSAGE OR LOOKUP ON LOCAL DOMAIN NAME SERVER)

405

EXECUTE USER COMMAND ON COMPUTER THROUGH WEB BASED BROWSER INTERFACE TO GENERATE IP ENCAPSULATED SIGNAL. THE USER COMMAND CORRESPONDING TO USER REQUEST TO VIEW AND/OR MODIFY USER SERVICES (e.g., CALLER-ID INFORMATION, CURRENT SERVICE CONFIGURATION, AND BILLING INFORMATION, NUMBER OF PHONE LINES PROVISIONED, CALL FORWARDING, NUMBER OF VOICE MAIL RINGS, INCOMING CALL BLOCKING NUMBERS, STREAMING SERVICES, AND PARENTAL CONTROL FEATURES)

405

SEND IP ENCAPSULATED SIGNAL TO DSL MODEM, BY COMPUTER

405

APPEND UNIQUE MODEM SERIAL NUMBER TO IP ENCAPSULATED SIGNAL, FORMAT IP ENCAPSULATED SIGNAL INTO ATM FORMATTED SIGNAL. AND SEND ATM FORMATTED SIGNAL TO DSLAM, BY DSL MODEM

405

SEND ATM FORMATTED SIGNAL TO ATM SWITCH, BY DSLAM

405

SEND ATM FORMATTED SIGNAL TO ATM TERMINATOR, BY ATM SWITCH

405

TERMINATE ATM CONNECTION, FORMAT ATM FORMATTED SIGNAL BACK INTO IP ENCAPSULATED SIGNAL, AND SEND IP ENCAPSULATED SIGNAL TO IP ROUTER

NO

LOCAL NETWORK TRAFFIC?

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YES

ROUTE IP ENCAPSULATED SIGNAL TO NON-LOCAL NETWORK, BY IP ROUTER

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SEND THE IP ENCAPSULATED SIGNAL TO HTTP WEB SERVER FOR PROCESSING, BY IP ROUTER

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SEND THE IP ENCAPSULATED SIGNAL TO INTERPRET INFORMATION, BY HTTP WEB SERVER

405

COMMUNICATE WITH NCS BASED UPON USER REQUESTS, BY HTTP WEB SERVER

405

END

FIG. 4